

Headquarters U.S. Air Force

Integrity - Service - Excellence

DoD Mission Design Series (MDS) Designator Program for Military Aerospace Vehicles Case Study



U.S. AIR FORCE

**March 2002
AF/XPPL**



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Introduction

- **Prior to 1962, seven different schemes existed for the naming of US military aircraft.**
- **In 1962, three of these schemes were still active and this was becoming cumbersome and confusing.**
- **A centralized naming convention was determined to be necessary as the number and variations of aircraft began to grow.**
- **In 1971, the Air Force was designated the Executive Agent for this endeavor.**
 - **Air Force assigned by SECDEF as Executive Agent**  [Click here to see document](#)
- **The Air Force was assigned the duty of sorting and maintaining a system applicable to military type aircraft.**
 - **The EA assignment applied to all military aircraft across all services**  [Click here to see document](#)



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Historical Background

- **1909 to 1919: No organized system of designation for Army aircraft. Aircraft were operated by the designations of individual manufacturers.**
- **1919: System of designation was adopted utilizing 15 basic mission symbols with other miscellaneous symbols, and a design number.**
- **During World War II: Many new mission symbols added, redesignated, overlapped, or discontinued, resulting in ambiguities and confusion.**
- **September 18, 1947: The National Security Act established the U.S. Air Force. The act also established a new designation system.**
- **September 18, 1962: New designation system modified and adopted by all branches of service.**
- **November 1971: Department of Defense Directive names Air Force as the Executive Agent responsible for the “Designating and Naming Military Aircraft, Rockets, and Guided Missiles.”**
- **May 1985: DoDD revised to include Air Force Joint Instruction 16-401, which serves as the current convention for naming US military aircraft.**



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Solution

- **Department of Defense Directive (4120.15) names Air Force as responsible agency for:**
 - **Assigning Mission Design Series (MDS) designators to all military aircraft**
 - **Coordinating the assignment of popular names**
 - **Publishing an approved list**
 - **Air Force was given specific duties with respect to the administration of this EA**
- **The current system uses a series of alphanumeric characters to differentiate MDS**
 - **Status prefix**
 - **Modified and basic mission**
 - **Vehicle type**
 - **Design number and series**



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Conclusions and Future Impact

- **The confusion of the WWII era has been significantly reduced.**
- **As weapon systems become more complicated and expensive, the numbers seen in the past will dwindle. As this happens, the system will continue to sort itself out through the retirement of legacy systems with incongruent names and MDS designations.**
- **This Executive Agent will need to remain in place as the tendency of each service to create their own individual naming convention would be too great not to have an overarching directive in effect.**
 - **Continues until voided or replaced by the SECDEF OR DEPSECDEF**

 [Click here to see document](#)

XPPL



Combat Support & Analysis Division

End of Case
Study

Department of Defense
DIRECTIVE NUMBER 4120.15
May 2, 1985
ASD(MI&L)

SUBJECT: Designating and Naming Military Aerospace Vehicles

References: (a) DoD Directive 4120.15, "Designating and Naming Military Aircraft, Rockets, and Guided Missiles," November 24, 1971 (hereby canceled)

(b) DoD Directive 5000.11, "Data Elements and Data Codes Standardization Program," December 7, 1964

(c) DoD 5000.12-M, 1, "DoD Manual for Standard Data Elements," October 1984, authorized by DoD Instruction 5000.12, April 27, 1965

1. REISSUANCE AND PURPOSE

This Directive reissues reference (a) and updates policies and responsibilities to promote clarity and consistency throughout the Department of Defense in referencing military aerospace vehicles, and to assign an executive agent to publish a joint regulation governing the designation and naming of these vehicles and a single DoD-wide source document containing approved designators and popular names.

2. APPLICABILITY

This Directive applies to the Office of the Secretary of Defense and its field activities, the Military Departments (including their National Guard and Reserve components), the Organization of the Joint Chiefs of Staff, the Unified and Specified Commands, and the Defense Agencies (hereafter referred to collectively as the "DoD Components").

3. POLICY

It is DoD policy that:



official documents and public statements.

3.2. To ensure consistency and uniformity of compliance with this policy, the Department of the Air Force is hereby assigned as the DoD Executive Agent for this function.

4. RESPONSIBILITIES

4.1. The Department of the Air Force, as the Executive Agent for this function, shall:

4.1.1. In coordination with the other Military Departments, publish a joint regulation governing the designating and naming functions for aerospace vehicles.

4.1.2. Assign MDS designators to all military aerospace vehicles, coordinate the assignment of popular names to all aerospace vehicles, and publish and update a list of approved MDS designators and names for aerospace vehicles in a single DoD-wide source document.

4.1.3. Act as the assigned responsible agent, under DoD Directive 5000.11 (reference (b)) and DoD 5000.12-M (reference (c)), to standardize appropriate data elements for all DoD data systems that require coded identities for aerospace vehicles. Coordinate these activities with the Logistics Data Element Standardization Management Program Office of the Defense Logistics Agency.

4.2. The Military Departments shall:

4.2.1. In coordination with the Department of the Air Force, assign popular names to their military aerospace vehicles consistent with this Directive and the joint regulation noted in paragraph 4.1.1., above. To ensure public suitability of popular names, the Department of the Air Force shall obtain the coordination of the Assistant Secretary of Defense (Public Affairs) before public announcement of the selected popular name for each aerospace vehicle.

AF assigned as Executive Agent

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AF assigned specific duties

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DODD 4120.15, May 2, 1985

4.2.2. Forward suggested changes to the joint regulation and the DoD-wide source document to the Department of the Air Force to facilitate preparation, coordination, and revision, as appropriate.

4.3. All DoD Components shall:

4.3.1. Disseminate the DoD-wide source document published by the Department of the Air Force as a reference for the names and MDS designators of military aerospace vehicles.

4.3.2. Coordinate with the Department of the Air Force, before referencing in official documents and public statements, aerospace vehicles in the planning or predevelopment stage that do not have approved MDS designators or names

5. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective immediately. The Department of the Air Force shall update the required joint regulation as required and publish the DoD-wide source document annually. Future proposed changes and revisions to these documents should be forwarded to the Secretary of the Air Force.

Effective until
revoked or
replaced

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Signed by
SECDEF or
DepSECDEF

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SIGNED
William H Taft, IV
Deputy Secretary of Defense